Hansen Cleaning Solvent Research

Completed Technology Project (2011 - 2012)



Project Introduction

Environmental regulation will force current baseline precision cleaning solvent (AK-225) to be phased out starting 2015; we plan to develop a new solvent or solvent blend that will replace the current baseline solvent (AK225). This project will attempt to develop a solvent around NASA's contamination needs, by using Hansen Solubility Parameters to identify those solvent blends most compatible with NASA's known contaminants, and then test those identified solvents.

The Plan is to test at least 3 solvent blends for cleaning efficiency on coupons exposed to known contaminants. The project has already created a test process that can tie results back to work done in the 1990's. We will use this data to support the Precision Cleaning and Contamination Control (PC3) efforts over the next few years.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Туре	Location
	Lead	NASA	Houston,
	Organization	Center	Texas
White Sands Test Facility(WSTF)	Supporting	NASA	Las Cruces,
	Organization	Facility	New Mexico



Project Image Hansen Cleaning Solvent Research

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Johnson Space Center (JSC)

Responsible Program:

Center Innovation Fund: JSC CIF



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Primary U.S. Work Locations

New Mexico

Images



12380-1380207382722.jpgProject Image Hansen Cleaning
Solvent Research
(https://techport.nasa.gov/imag
e/2325)

Project Management

Program Director:

Michael R Lapointe

Program Manager:

Carlos H Westhelle

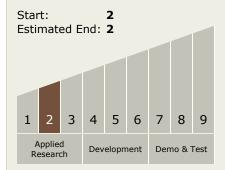
Project Manager:

Christina Y Pina Arpin

Principal Investigator:

Christina Y Pina Arpin

Technology Maturity (TRL)



Technology Areas

Primary:

- TX13 Ground, Test, and Surface Systems
 - └─ TX13.2 Test and Qualification
 - └─ TX13.2.1 Mechanical/Structural Integrity Testing

